showed variability according to race, possibly due to substantial differences in education, occupation and community poverty rates between Whites and AAs. It may be important to understand these differences for policy and community interventions, and addressing health disparities.

368

AGE WHEN THE FIRST SIGN OF OSTEOARTHRITIS APPEARS AMONG END-STAGE OSTEOARTHRITIC KNEES

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Purpose: Osteoarthritis of the knee joint (KOA) is one of the biggest problems that cause aged population disabled. Among several treatments of KOA, total knee arthroplasty (TKA) appears to be the only recommendable choice for end-stage KOA. As society ages, the number of TKA performed is increasing. TKA is highly effective but prevention of KOA progression that lead to resultant diminished number of TKA would be our goal to seek. For that purpose, detecting population at risk at their very early stage of KOA is mandatory. Among several possible parameters, the age of the first appearance of KOA sign such as starting pain or difficulties in squatting might work for this purpose. The purpose of this study is to examine the age when the first sign of KOA appears among TKA patients.
Methods: Eighty-five patients who received TKA in our institution in the last three years (May 2006 to April. 2009) were involved. Among them, only primary KOA excluding inflammatory joint disease, osteonecrosis, and prior history of trauma were selected. Thus total of 48 patients left and they were closely interviewed about their corresponding knees. Followings are main questions to be asked. (1) At what age did you feel any sign of knee symptoms lasting more than a week? (2) Every 5 years of age starting from 30, patients were asked “Did you feel any signs of the knee?” Demography of the patients and past history were also recorded. Surveyed ages were compared between female group and male group as well as obese group (BMI$>$25.0) and non-obese group (BMI$<$25.0).
Results: hirty-eight were female and 10 males. Right knee involvement was 24 and left 24. Average age when TKA was performed was 74.1$\pm$5.1 (63-86) years old. Average age of the first appearance of any sign of corresponding knee was 62.5$\pm$8.2 (46-79) years old. Average duration from the onset to TKA was 11.8$\pm$7.1 years (2-26). No knee reported any symptom under the age of 45. Only three knees reported the existence of symptoms of corresponding knee at age 50 (6.3%) and eleven knees (22.9%) at 55. There is no difference between female and male about age of the first appearance of symptom and nor the age of TKA. No difference was observed between obese group (61.9$\pm$8.1 years old) and non-obese group (63.6$\pm$7.6 years old).
Conclusions: Age of on-set of KOA has been reported different among ethnicity. As for Japanese population, among non-surgically treatment group of patients, the onset of KOA was reported 56.2 years old for obese-group and 64.9 for non-obese group. Comparing to these data, our data did not exhibited early symptomatic sign of OA even dealing with end-stage KOA. This suggests the existence of rapid progression subset of KOA. Indeed, in the present study 9 knees received TKA less than 5 years from the on-set. Our data suggests that relying upon the age of on-set of KOA as discriminating factor for high risk group of patients that might require TKA in the future and low risk group appeared to be difficult, although proper control group was not set in the present study.
Age of on-set of KOA in the end-stage TKA patients was 62.5 and seemed not to be earlier comparing to conservatively treated patients.

369

KHOALA (KNEE AND HIP OSTEOARTHRITIS LONG TERM ASSESSMENT) COHORT: SET UP

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Purpose: There is a substantial lack of data on osteoarthritis (OA) epidemiology in Europe. Because of its high prevalence and its consequences OA is a public health and society problem. The aim of the project is 1) to set up a population-based cohort of symptomatic knee and hip OA patients, 2) to describe the natural history of OA particularly up to total joint replacement surgery and 3) to identify predictive factors of OA worsening and of its consequences.
Methods: The KHOALA cohort is a multicentre cohort of patients with a symptomatic knee (tibio-femoral) and/or hip OA, aged between 40 and 75 years. Patients are identified during a prevalence survey. Using random digit dialing survey on phone calls, subjects identified from a population-based sample are screened by a validated questionnaire. In case of a positive questionnaire, they are invited to confirm the diagnosis by a physical examination and X-rays. Eligible cases for the cohort are all the subjects with knee or hip OA according to the ACR criteria with a radiological Kellgren stage above 1. Demographic data, patient reported outcome measures, total joint replacement procedures, health care expenses, X-rays and blood samples will be collected at baseline and every two years. A biobank will be set up (DNA, serum and urine collection). Every other year, mailed questionnaires will be collected.
Results: The prevalence survey, conducted in 6 investigating centres has started since April 2007. The recruitment within the KHOALA cohort started with the confirmation of prevalent cases. In two years, 135 620 telephone numbers were called, 6 3067 homes answered and 30 977 had at least one subject aged between 40 and 75 years old. Among them, 8498 were detected positive and could have OA. 2 839 (33%) subjects have been seen in consultation to confirm the diagnosis. Reasons for non participation to the study were: phone non availability (371), pain disappearance (435) and refusals (907). Participation and recruitment in the cohort were different according to the region. Among subjects having completed the ascertainment procedure, 795 have a symptomatic OA and 704 are included in the cohort (147 hips, 495 knees, 62 hip and knee).The mean age of the patients included in the cohort is 62 years old and 68% of the patients are women. After a start up period, a period of procedure validation and of quality tests, the first months of recruitment has allowed for determining the rhythm of inclusions. We plan to recruit subjects on a 2 year period.
Conclusions: The set up of this research program is important to fill in to the missing epidemiological data on symptomatic hip and knee OA. The recruitment of the cohort by a mean of a prevalence survey carried out by phone screening is original. It has been validated by pilot studies and allows for getting a population based representative sample of OA patients. It allows for identifying subjects from outside the health care system.